App No.: 10/751,439
Inventor: Howard E. Rhodes
Title: METHOD AND APPARATUS PROVIDING CMOS IMAGER DEVICE
PIXEL WITH TRANSISTOR HAVING LOWER THRESHOLD VOLTAGE
THAN OTHER IMAGER DEVICE TRANSISTORS

32

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VDD

44

VOUT



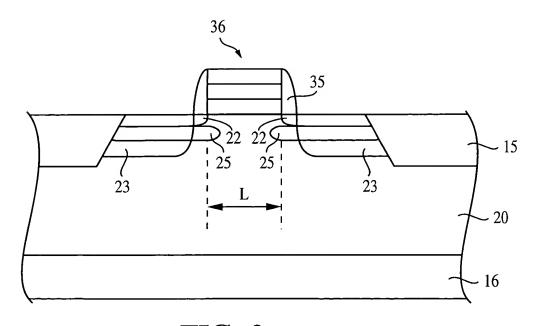


FIG. 2

App No.: 10/751,439 Docket No.: M4065.0624/P6 Inventor: Howard E. Rhodes
Title: METHOD AND APPARATUS PROVIDING CMOS IMAGER DEVICE PIXEL WITH TRANSISTOR HAVING LOWER THRESHOLD VOLTAGE THAN OTHER IMAGER DEVICE TRANSISTORS 136 -133 -132 -131 127 <u>150</u> -150 **-** 180 - 110 FIG. 3 – W -133 -132 - 167 <u> 168</u> -131 <u>150</u> -150 127 136 - 180 - 110 FIG. 4 143 - 167 168 <u>150</u> 127 -150 122 136 - 180 - 110 FIG. 5

Docket No.: M4065.0624/P624

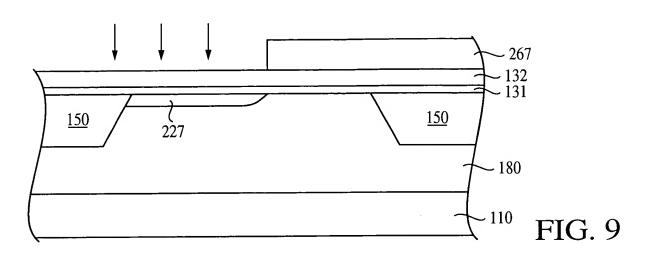
App No.: 10/751,439 Docket No.: M4065.0624/P6/ Inventor: Howard E. Rhodes Title: METHOD AND APPARATUS PROVIDING CMOS IMAGER DEVICE PIXEL WITH TRANSISTOR HAVING LOWER THRESHOLD VOLTAGE THAN OTHER IMAGER DEVICE TRANSISTORS 136 -133 -132 -131 127 <u>150</u> - 150 125 - 180 - 110 FIG. 6 136 -147 135 129 129 <u>150</u> - 150 127 125 - 180 - 110 FIG. 7 100 129 129 <u>150</u> - 150 127 123 123 125 **-** 180 - 110 FIG. 8

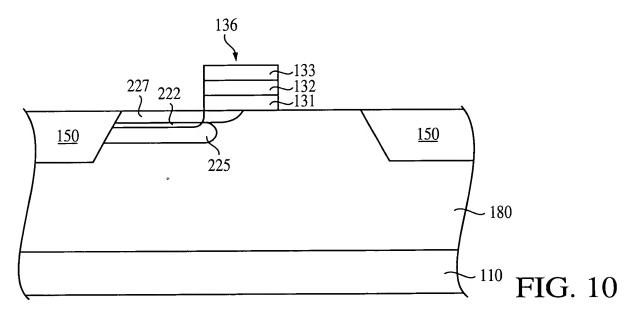
Docket No.: M4065.0624/P624

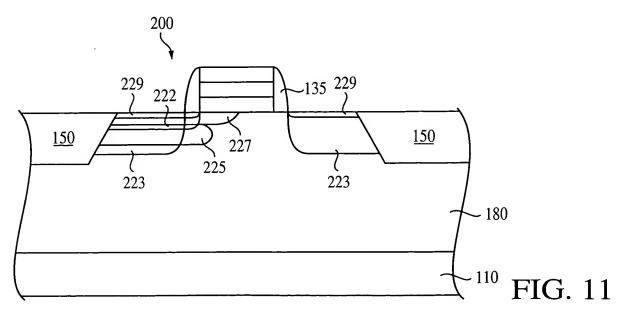
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Docket No.: M4065.0624/P624

Inventor: Howard E. Rhodes TITIE: METHOD AND APPARATUS PROVIDING CMOS IMAGER DEVICE PIXEL WITH TRANSISTOR HAVING LOWER THRESHOLD VOLTAGE THAN OTHER IMAGER DEVICE TRANSISTORS







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PIXEL WITH TRANSISTOR HAVING LOWER THRESHOLD VOLTAGE
THAN OTHER IMAGER DEVICE TRANSISTORS 136 -133 -132 131ر <u>150</u> <u>150</u> 322 322 - 180 110 FIG. 12 343 - 367 368 150 150 322 322 - 180 - 110 FIG. 13 136 -345 322 322 <u>150</u> <u>150</u> 325 - 180 FIG. 14

Docket No.: M4065.0624/P624 App No.: 10/751,439 Inventor: Howard E. Rhodes Title: METHOD AND APPARATUS PROVIDING CMOS IMAGER DEVICE PIXEL WITH TRANSISTOR HAVING LOWER THRESHOLD VOLTAGE THAN OTHER IMAGER DEVICE TRANSISTORS 136 -133 -132 329 329 322 <u>150</u> <u>150</u> 325 - 180 - 110 FIG. 15 300 136 329 329 <u>150</u> 322 - 150 323 323 - 180 **-** 110 FIG. 16 400 136 -135 ₄₂₉ 429 <u>150</u> <u>150</u> 422 422 423 423 - 180

FIG. 17

- 110

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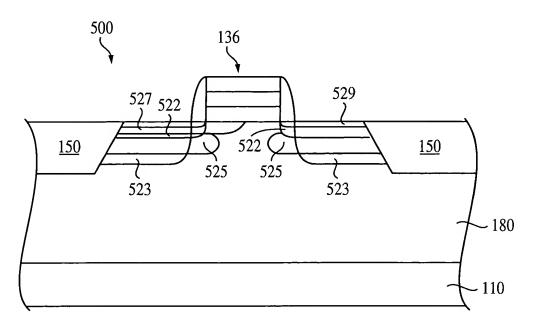
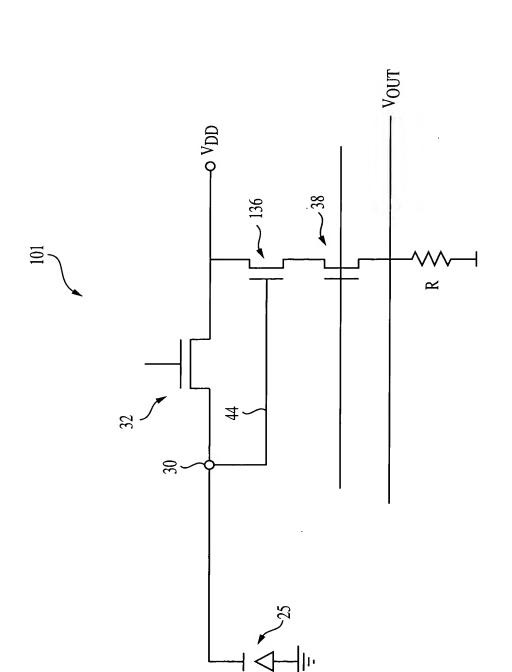


FIG. 18

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